

**IMMERSION TEST REPORT
FOR THE
AVIATION LANTERNS A704-5
PART NUMBER A704R-0005**

**MANUFACTURED BY
CARMANAH TECHNOLOGIES, INC.
BUILDING 4 – 203 HARBOUR ROAD
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**PREPARED BY
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The results of the testing reported herein relate only to the actual items tested.

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Maintains Laboratory Accreditation to ISO/IEC 17025 and ISO 9001

A P P R O V A L S H E E T

Environment Associates hereby certifies that the information presented in this report is, to the best of our knowledge, true and correct in all respects.

ENVIRONMENT ASSOCIATES, INC.
Martin J. Povall Jr., Laboratory Manager

Date

Report Written by Gerald Flippen on March 31, 2006

R E V I S I O N S H E E T

<u>REVISION LETTER</u>	<u>DESCRIPTION OF REVISION</u>	<u>DATE</u>	<u>APPROVAL</u>
None	Original Issue	03/31/06	

A D M I N I S T R A T I V E D A T A

PURPOSE OF TEST: **To demonstrate compliance to the applicable requirements of the specifications cited below.**

ITEM SUBJECTED TO TEST: **Aviation Lanterns A704-5
Part Number A704R-0005**

TEST SPECIFICATIONS: **A704-5 Test Plan**

SUBMITTED BY: **Carmanah Technologies, Inc.
Building 4-203 Harbour Road
Victoria, B.C., Canada V9A 3S2**

TESTING AGENCY: **Environment Associates, Inc.
2300 West Cape Cod Way
Santa Ana, California 92703**

DATES TESTING CONDUCTED: **February 27, 2006**

AUTHORIZATION TO TEST: **Carmanah Technologies Purchase Order Number
240266**

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S U M M A R Y O F T E S T R E S U L T S

<u>TEST</u>	<u>SAMPLE NO.</u>	<u>SERIAL NO.</u>	<u>PASS/FAIL</u>
2.0 Immersion	JC08250002		X
	JC08250012		X
	JC08250035		X
	JC08250037		X

Note:

“Pass” in the column above indicates completion of the test.

1.3 TOLERANCES (Continued)

Temperature at the control sensor: ± 2.0 degrees C
Sensor response time: <20 seconds

Time: $\pm 5\%$

Laboratory Ambient Conditions

All laboratory ambient conditions was maintained as follows:

Temperature: 25 ± 10 degrees C

Pressure: 30 ± 2 inches Hg

Relative Humidity: 90% maximum

2.0 IMMERSION

2.1 REFERENCE

A704-5 Test Plan, Revision A, Paragraph 6.5

2.2 PROCEDURE

2.2.1

The Aviation Lanterns A704-5 listed below were subjected to two (2) cycles of immersion as described below.

Sample Number

JC08250002

JC08250012

JC08250035

JC08250037

2.2.2

The cold bath temperature was +25 (+10/-5) °C. The cold bath was tap water saturated with sodium chloride.

2.2.3

The hot bath temperature was +65 (+5/-0) °C. The hot bath was fresh tap water.

2.2.4

Sample number JC08250002 was immersed in the hot water bath for a period of fifteen (15) minutes.

2.2.5

The test sample was removed from the hot bath and immersed in the cold bath for a period of fifteen (15) minutes.

2.2.6

Paragraph 2.2.4 and 2.2.5 were repeated one (1) additional time for a total of two (2) cycles.

2.2.7

Sample number JC08250002 was visually examined. There was no visible or functional damage noted.

2.2.8

Sample number JC08250012 was immersed in the hot water bath for a period of fifteen (15) minutes.

2.2.9

The test sample was removed from the hot bath and immersed in the cold bath for a period of fifteen (15) minutes.

2.2.10

Paragraph 2.2.8 and 2.2.9 were repeated one (1) additional time for a total of two (2) cycles.

2.2.11

Sample number JC08250012 was visually examined. There was no visible or functional damage noted.

2.2.12

Sample number JC08250035 was immersed in the hot water bath for a period of fifteen (15) minutes.

2.2.13

The test sample was removed from the hot bath and immersed in the cold bath for a period of fifteen (15) minutes.

2.2.14

Paragraph 2.2.12 and 2.2.13 were repeated one (1) additional time for a total of two (2) cycles.

2.2.15

Sample number JC08250035 was visually examined. There was no visible or functional damage noted.

2.2.16

Sample number JC08250037 was immersed in the hot water bath for a period of fifteen (15) minutes.

2.2.17

The test sample was removed from the hot bath and immersed in the cold bath for a period of fifteen (15) minutes.

2.2.18

Paragraph 2.2.16 and 2.2.17 were repeated one (1) additional time for a total of two (2) cycles.

2.2.19

Sample number JC08250037 was visually examined. There was no visible or functional damage noted.

2.3 RESULTS

2.3.1

The immersion test was performed at the facility of Environment Associates, Inc., Santa Ana, California on February 27, 2006.

2.3.2

All inspection and operation of the test samples were by Environment Associates personnel at the direction of Carmanah Technologies personnel.

2.3.3

The test log may be found in Appendix I. The list of equipment used during the test and test photographs may be found in Appendix II.

A P P E N D I X I

T E S T D A T A

2 . 0 I M M E R S I O N

**T h e t o t a l n u m b e r o f p a g e s i n
t h i s s u b s e c t i o n i s 2**

A P P E N D I X I I

T E S T E Q U I P M E N T L I S T S

A N D

T Y P I C A L T E S T S E T U P P H O T O S

**T h e t o t a l n u m b e r o f p a g e s i n
t h i s A p p e n d i x i s 3**